Table 4. Independent associations of sedentary behavior and moderate-vigorous physical activity with cardiometabolic riska

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | |  |  |  | |  | | |
|  | Quartile of Sedentary Hours | | | |  |  | Mod-Vig Physical Activity | | |  | |
|  | 1 | 2 | 3 | 4 |  |  | Insufficient | Sufficient | | |  |
| Biomarker | 0-7.92 | 7.93-8.17 | 8.18-10.63 | ≥10.64 | ptrend |  | <150 min/wk | ≥150 min/wk | | | Pdiff |
| Weightb | 71.2 (1.9) | 74.4 (1.4) | 76.2 (1.4) | 79.0 (1.2) | <0.01 |  | 77.4 (1.1) | 73.0 (1.6) | | | <0.01 |
| BMIb | 26.1 (0.7) | 27.0 (0.5) | 27.6 (0.6) | 28.7 (0.4) | <0.01 |  | 28.1 (0.4) | 26.5 (0.5) | | | <0.01 |
| Waist Circumferenceb | 96.7 (1.7) | 99.2 (1.5) | 101.5 (1.5) | 104.3 (1.1) | <0.01 |  | 102.8 (1.2) | 98.0 (1.5) | | | <0.01 |
| Systolic BPb | 139 (1) | 138 (1) | 134 (1) | 137 (1) | 0.33 |  | 138 (1) | 136 (1) | | | 0.52 |
| Diastolic BPb | 62 (1) | 62 (2) | 59 (2) | 62 (1) | 0.46 |  | 62 (1) | 60 (2) | | | 0.02 |
| Total Cholesterolb | 190 (4) | 186 (3) | 189 (4) | 186 (4) | 0.40 |  | 187 (3) | 189 (4) | | | 0.52 |
| HDLb | 52.8 (1.0) | 50.8 (1.0) | 50.6 (1.0) | 50.2 (1.1) | 0.06 |  | 50.8 (1.0) | 51.4 (1.1) | | | 0.05 |
| HbA1Cb | 6.1 (1.0) | 6.0 (1.0) | 6.1 (1.0) | 6.2 (1.0) | 0.15 |  | 6.1 (1.0) | 6.1 (1.0) | | | 0.49 |
| CRPb | 0.22 (1.15) | 0.23 (1.12) | 0.25 (1.13) | 0.34 (1.14) | <0.01 |  | 0.29 (1.11) | 0.23 (1.15) | | | 0.01 |
| Triglyceridesc | 131.0 (1.1) | 132.2 (1.1) | 140.3 (1.1) | 135.3 (1.1) | 0.85 |  | 138.3 (1.1) | 131.1 (1.1) | | | 0.20 |
| LDLc | 94.3 (6.4) | 94.1 (5.6) | 93.1 (4.5) | 90.1 (6.0) | 0.37 |  | 92.2 (4.7) | 93.6 (5.7) | | | 0.78 |
| Plasma Glucosec | 116.4 (1.1) | 116.0 (1.1) | 120.2 (1.1) | 120.7 (1.1) | 0.08 |  | 116.3 (1.1) | 120.3 (1.1) | | | 0.22 |

a Values are least squares mean (standard error), and adjusted for age, gender, ethnicity, education, income, marital status, alcohol consumption, current smoking status, cardiovascular disease, and accelerometer wear time, and BMI (except for weight, waist circumference, and BMI). Additional adjustments for PA and SB in models 1 and 2, respectively. BMI=body mass index; BP = blood pressure; HDL = high-density lipoprotein; LDL = low-density lipoprotein; CRP = C-reactive protein; and HbA1c = glycated hemoglobin

b n=1914.

c n = 809; 12-hour fasting blood draw subsample.